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**MINISTRY OF FINANCE**

(ECONOMY COMMITTEE)

GOVERNMENT OF INDIA

*New Delhi, the 6th December, 1948.*

From

G. S. RAU, Esquire,  
Secretary, Economy Committee, New Delhi.

To

The Secretary to the Government of India,  
Ministry of Finance, New Delhi.

re,

*Interim Report of the Economy Committee on the Ministry of Agriculture.*

I am directed to forward herewith a copy (with three spare copies) of the Interim Report of the Economy Committee on the Ministry of Agriculture. Shri S. K. Patil is out of the station but has given his approval to the report and his signature will be affixed to it on his arrival at Delhi.

2. The recommendations in the report have been made after detailed discussions with the Officers of the Ministry, who have had an opportunity to see the report in draft, and they represent the limit to which the Committee has considered it possible to meet the view of the Ministry.

Yours faithfully,

G. S. RAU.



## MINISTRY OF AGRICULTURE

The Ministry of Agriculture was created in the year 1945 when the Education, Health and Lands Department was trifurcated into the Departments of Education, Health and Agriculture. Its main functions are the development of Agriculture including Animal Husbandry, Forestry and Fisheries and the promotion of research and special studies in these subjects (for details see Annexure IV). We are fully conscious of the important duties and responsibilities that fall on this Ministry under a national Government committed to effect an improvement in the economic conditions of the masses largely dependent on land. Moreover, at the present juncture when there is an overall shortage of food grains in the world and India is a deficit country dependent on imports from foreign countries of food grains to feed her population, Government has special responsibility to spare no effort to increase the food production within the country.

2. In order to discharge the growing responsibilities, the Central Government's machinery dealing with agriculture has considerably expanded in recent years. The estimated expenditure for 1948-49 is Rs. 373 lakhs as against the expenditure in 1938-39 of Rs. 78 lakhs. In addition expenditure on capital account in 1948-49 is estimated at Rs. 607 lakhs (for details see annexure V). The results achieved by the Ministry cannot, however, be said to be commensurate with the increased expenditure. For example, the Ministry launched in the year 1943 the 'Grow More Food Campaign' and upto the end of April 1947 spent over Rs. 15 crores without achieving results commensurate with the expenditure. The Food Grains Policy Committee which went into the question thoroughly have remarked "Nevertheless after careful examination of the matter we have come to the conclusion that by and large the 'Grow More Food Campaign' did not produce the results aimed at. The measures which were undertaken were doubtless in the right direction, *but the objectives were too diversified, the effort was inadequate and in most areas the necessary vigour and drive was lacking*". It is necessary to ensure that this mistake is not repeated. We have discussed with the representatives of the Ministry of Agriculture ways and means for avoiding wasteful expenditure and of organising the functions of the Ministry on an efficient basis; but unfortunately it became apparent during the discussions that there was a fundamental difference between our approach to the problem and that of the Ministry. We have given careful consideration to the views expressed by them and the manner in which the Ministry is now organised and functioning, and are satisfied that there is considerable scope for economy. In making our recommendations we have been primarily influenced by the following considerations:

- (a) Governmental effort must be organised in accordance with a pre-determined plan which should, particularly in respect of development programmes, be framed after taking into account the immediate as well as long term needs of the country and the availability of money, men and material. It is apparent from the examination we have been able to make till now of the development plans in this Ministry as well as in some other Ministries that the development programmes which have been framed have little relation to the capacity of Government to carry out those programmes. All over the field the

results achieved are far short of expectations and we are constrained to observe, even after making due allowances to the uncertainties inherent in present circumstances, that the plans framed are somewhat unrealistic.

- (b) In any scheme of work, Provincial Governmental machinery should be fully utilised and Central Government's activities should be restricted only to over-all co-ordination, establishment of All India Research Institutes and to such other activities which a Provincial Government cannot perform economically and adequately. We note in passing that this view is substantially in accordance with the division of functions between the Centre and the Provinces proposed in the draft Constitution. In the ultimate analysis the implementation of any policy of agricultural development is required to be done at the level of the cultivator and to ensure effective implementation at that level, the Central Government must necessarily rely on Provincial Governments. It was urged that Provinces had not in the past discharged their functions with regard to Agricultural development efficiently and that Provinces were not even now equipped adequately to discharge the functions that devolve on them. In so far as such failure is due to want of funds and the centre is in a position to provide them the proper course is for the Central Government to assist the Provincial Governments financially. In so far as such failure is attributable to the inadequacy of Provincial Agricultural Organisations, the proper course is not to create a top-heavy structure at the Centre but to assist Provinces in obtaining suitable personnel. Where a Province requests the Centre for financial assistance, the Centre may rightly require the Province to strengthen its Agricultural Department to ensure that the money is spent to the best advantage.

- (c) The work in the Ministry and the Offices under its control should be so organised that the functions of the various officers are defined and every officer fully discharges the duties and responsibilities assigned to his post and the procedure should be such as to curtail unnecessary and prolix noting.

It was suggested on behalf of the Ministry that the division of work amongst officers in a Ministry *e.g.*, a Secretary and a Joint Secretary, was a matter for the Ministry to decide having regard to the Rules of Business. We do not agree with this contention. The functions to be discharged by different grades of officers have already been laid down by Government and the salaries attached to the various posts are fixed having regard to the duties that the incumbents of those posts are expected to discharge. It is waste of public funds to create a post of a particular status and then on one ground or another to assign to it less responsibility than is associated with it.

3. *The Grow More Food Campaign.*—A big item of expenditure in the budget of the Ministry of Agriculture is the Grow More Food Campaign. As already observed, the moneys spent on the campaign up to the end of 1946 did not produce adequate results. Admittedly, one of the reasons for this failure was the absence of a clear-cut plan. Requests for help

under the Grow More Food Scheme were received from Provinces and dealt with in an *ad hoc* manner. After the formation of the new Government, the Ministry of Agriculture, early in 1947, drew up in consultation with Provincial Governments, a 5 year plan which prescribes the targets to be achieved by each Province. The plan aims at an increased production of about 3.5 million tons of foodgrains, at a cost to the Centre of about Rs. 74 crores, by

- (a) distribution of improved seeds and manures,
- (b) construction of minor irrigation works including tube wells, installation of pumping sets etc., and
- (c) land improvement schemes including reclamation of waste lands.

If the plan yields the results expected of it, it would be definitely economical. The plan has been in operation for nearly a year and a half. Last year provision was made in the budget for an expenditure of Rs. 4 crores on this account but actual expenditure amounted to about Rs. 2.5 crores only. In a programme which is expected to require about five years for completion, progress in the preliminary stages must necessarily be comparatively slow; nevertheless we feel that the results achieved so far are disappointing. Partly this may be ascribed to the unsettled conditions created in certain Provinces by the Partition. But the main difficulty seems to be shortage of personnel and material. We recommend that definite quotas of steel and other material which may be required to implement the Grow More Food Campaign should be fixed and these quotas should not be reduced except in very special circumstances. The targets should be readjusted according to the availability of material and personnel. The food position continues to be acute and it is essential both on grounds of economy and other considerations to increase food production within the country. But the framing of targets which are not in consonance with the country's capacity will lead to waste of money and effort.

4. It was suggested on behalf of the Ministry of Agriculture that the existing financial procedure causes delay in obtaining sanctions for the Grow More Food Projects and is partly responsible for the slowness in the implementation of the Grow More Food Campaign. We have not as yet had an opportunity of examining the Ministry of Finance with regard to this complaint. We recommend, however, that Central grants under the Grow More Food Schemes should be confined only to schemes that will secure a higher yield of foodgrains rootcrops and fish in maritime provinces, in accordance with an accepted overall plan and the conditions which should be fulfilled by Grow More Food Projects should be precisely defined. Scrutiny by the Centre of individual Grow More Food Projects should then be primarily directed to see that these conditions are fulfilled and the actual financial sanction will become merely formal.

5. It is, however, understood that schemes other than schemes for growing foodgrains are also qualifying for grants under the Grow More Food Campaign. A central subsidy for foodgrains is justified because, to the extent foodgrains are not grown in the country the Centre will have to spend money on importing the foodgrains. In our view the Centre should not subsidise under the Grow More Food Campaign any schemes other than schemes for growing foodgrains or any schemes that will only have an indirect effect e.g., propaganda by distributing posters or

otherwise, schemes for increasing production of poultry, eggs, fruit, etc. Such expenditure should be the responsibility of the Provincial Governments.

6. To assist in the implementation of the Grow More Food Campaign the Ministry of Agriculture employ an Agricultural Development Commissioner and an Irrigation Adviser with a number of subordinate staff. The Agricultural Development Commissioner is responsible for land reclamation including the Central Tractors Organisation and the distribution of fertilisers, manures and other supplies essential for the projects under the Grow More Food Campaign. The Irrigation Adviser is responsible for the Central Ground Water Organisation which is concerned with the preparation and progressing of plans for the sinking of tube wells.

7. *The Central Tractor Organisation.*—The Food Grains Policy Committee recommended that the Central Government should undertake the reclamation of cultivable waste lands and recommended for the purpose, the establishment of an autonomous organisation to be known as the 'Central Land Reclamation Organisation' with a capital of Rs. 50 crores. This proposal is under consideration of Government. Whether such an organisation can work effectively will depend on the availability of the machinery required. It is unlikely that the machinery required could be imported in less than 18 months from the time an order is placed. For the present a Central Tractor Organisation has been established under the Central Government to look after the *heavy* tractors which were purchased from the American surplus stores in India. The tractors thus purchased have been reconditioned and reclamation work on behalf of Provincial Governments is in progress in various areas in the United Provinces and the Central Provinces. It will be economical if the Central Tractors Organisation continues as a Central Organisation for some years at least. The Central Tractors Organisation is sanctioned on a temporary basis until the end of the financial year. In view of the programme of reclamation envisaged by the Foodgrains Policy Committee, it is evident that the Central Tractors Organisation would have to continue for many years to come. It is uneconomical to sanction an organisation for short periods only when there can be no doubt that the organisation must necessarily continue for a number of years. The staff required could be sanctioned for 5 years. It is essential that in dealing with financial sanctions for staff required for development programmes a broader view of Government's financial responsibilities is taken and the sanctions given for a period which would enable Government to attract well qualified technical staff.

The full cost of reclamation is paid by the Provincial Governments concerned. In calculating depreciation charges the life of a tractor is estimated at 7,500 working hours. We were told that the life of a new tractor is 10,000 working hours. In our opinion, the estimate of the life of a reconditioned tractor is on the high side. We recommend that the allowance to be made for depreciation should be re-examined in the light of the operations that have been recently carried out and the charges for ploughing by heavy tractors revised accordingly.

In addition, the Central Tractors Organisation has undertaken during the current year cultivation by *light* tractors of land that has remained uncultivated for want of cattle and labour in the East Punjab and in the Matsya Union. We were told that the Central Government were forced this year to undertake this cultivation in view of the inability of the Governments of the East Punjab and of the Matsya Union to undertake

the work themselves. In our opinion the Centre should not accept any such liability for cultivation in future. Where a Provincial Government expresses its inability, for lack of technical equipment, personnel or similar reasons, to undertake the work, the proper course would be for the Central Government to assist the Provincial Government in setting up a suitable organisation under the Provincial Government for the purpose by supplying the requisite machinery and by loaning the requisite personnel. If the Centre undertakes the work itself there will be a tendency on the part of the Provincial Government to shirk its responsibility and for the Centre to continue to perform work which appropriately must be undertaken by the Provinces.

8. *The Central Ground Water Organisation.*—The Central Ground Water Organisation is responsible for—

- (a) exploratory work of sub-soil water conditions;
- (b) assisting, where required, in actual construction of tube wells and in doing so to demonstrate the use of mechanical equipment and improved technique;
- (c) assisting Provinces and States in obtaining materials required for tube well projects; and
- (d) training of personnel.

The Foodgrains Policy Committee recommended that the Centre should confine itself to exploratory work of sub-soil water conditions in all parts of the country *i.e.*, to (a) above. According to the 5 year plan of the Grow More Food Campaign tube wells are to be constructed only in the United Provinces, Bihar and West Bengal. As regards (a) and (b) we note that the Government of the United Provinces have carried out extensive construction of tube-wells in the United Provinces in the past without any assistance from the Centre. The Government of Bihar have also constructed tube wells though not on the same scale as in the United Provinces. As regards (c) the Centre's assistance will be necessary in securing machinery from overseas and making an equitable distribution of the available supplies to the United Provinces, Bihar, Bengal and perhaps East Punjab. This work can be appropriately performed by the Agricultural Development Commissioner who is responsible for distribution of other essential supplies required to carry out the Grow More Food plans. As regards (d) since the scheme started, a total of 93 candidates have been trained of whom 5 did not complete training. The expenditure on officers and establishment of the school during this period is over a lakh of rupees. The training has cost over Rs. 1,000 per candidate which is excessive considering the nature of training. Besides, the training is such that it can be given more appropriately during the course of actual construction of the tube wells and no separate school to train workers is necessary. The number of candidates from each Province is comparatively small and it should be possible for the Provincial Organisations for boring and construction of tube wells to arrange for the necessary training. We recommend that the Central Ground Water Organisation should be abolished.

9. *The Indian Council of Agricultural Research.*—The Research and Training activities of the Ministry of Agriculture are discharged partly through the Indian Council of Agricultural Research and partly through the various research institutes working under the Ministry. The Indian Council of Agricultural Research which has been registered in 1929 under

the Registration of Societies Act, 1860 is responsible *inter alia* to undertake, aid, promote and co-ordinate agricultural and animal husbandry education, research and its application in practice, development and marketing in India by all means calculated to increase scientific knowledge of the subjects and to secure its adoption in every day practice. Its main sources of income are the cesses levied under the Agriculture Produce Cess Act, 1940 which yield a revenue on an average of Rs. 11 lakhs per annum, and *ad hoc* grants received from the Central Government and Provincial and State Governments. The Council invites Provinces and constituent States and other organisations interested in research to submit by a specified date schemes of research, scrutinises them and sanctions such schemes as are found suitable. It was admitted by the Vice-Chairman of the Indian Council of Agricultural Research that the present system was not satisfactory and has resulted in a scramble for grants. In our view the primary function of the Indian Council of Agricultural Research is to lead and direct research in Agriculture, Animal Husbandry, etc., in a manner best calculated to help agriculture in the country and not merely to give grants to needy applicants wishing to undertake research. For this purpose the Council should draw up an overall plan for research for the whole of India, take into account researches which are already being carried out in the various Universities and Research Institutions in the country, persuade them to fit their work into the all-India plan and promote those schemes in the all-India plan for which no provision already exists. Secondly, the Council, being an all-India body, should not concern itself with petty schemes which could appropriately be left to be financed by local resources. Thirdly the progress of research schemes should be carefully watched by expert Scientists so that the all-India plan is annually reviewed and modified as necessary.

10. It has been suggested that with the establishment of the Ministry of Agriculture, the Indian Council of Agricultural Research could appropriately be dissolved. As the primary function of the Indian Council of Agricultural Research is to promote research on the basis of an all-India plan it will in any case be necessary to have a body on which the Central and the Provincial Governments and various technical experts are represented. By constituting this body into a registered society, it has been possible to secure freedom from the financial restrictions inherent in an ordinary Government organisation and this position must continue if research is to continue unhampered. There is ample provision for close co-ordination between the Council and Government in as much as the Chairman of the Council is the Minister of Agriculture and the Vice-Chairman of the Council is an Additional Secretary to Government. The Secretary of the Agriculture Ministry is also a member of the Council. It is, however, necessary to ensure that the formation of a registered society does not lead to duplication of staff. This is already ensured in part in so far as there are certain officers who act both as expert Advisers to Government and to the Council. The modifications we suggest are—

- (a) the posts of Agricultural Commissioner to the Government of India and the Agricultural Development Commissioner to the Government of India should be combined;
- (b) there is no necessity to have a post of Cattle Utilisation Adviser in addition to the post of Animal Husbandry Commissioner; and



- (c) the post of Vice-Chairman, Indian Council of Agricultural Research should be equated in status and pay to that of a Joint Secretary.

Recently the aims and objects of the Council were amended so as to include 'Development' of Agriculture and Animal Husbandry. The object was to ensure that the results of research were tried on a field scale before their benefits could be carried to the agriculturists. The Indian Council of Agricultural Research is, however, preparing to undertake a scheme for development of over 40 villages in Delhi Province with a view to develop them into model villages. Such functions, in our view, can never appropriately belong to the Indian Council of Agricultural Research and it is wrong, in our opinion, for its funds to be spent on such projects. The articles of association of the Council should be amended to restrict the scope of 'Development' accordingly. Also as there is a separate department to deal with 'Marketing', we consider that 'Marketing' should be excluded from the scope of the Indian Council of Agricultural Research.

#### *Research Organisations.*

11. *The Indian Agricultural Research Institute.*—The Ministry of Agriculture have a scheme for the expansion of the Indian Agricultural Research Institute at Delhi which is intended to increase the number of students to be admitted each year for training from 50 to 100 and also to improve, and to provide in new directions facilities for research and training: The additional cost of the scheme is estimated at Rs. 100 lakhs non-recurring on equipment, lands and building and Rs. 28,68,000 per year recurring. We have scrutinised the development proposals and have the following recommendations to make:—

- (a) It is proposed to start separate sections for Statistics and Agricultural Economics to give training to the students at the Institute. At present the statistician of the Indian Council of Agricultural Research is assisting the institute in giving training in statistics to students at the institute. Similarly the Economic and Statistical Adviser to the Government of India could be utilised to give lectures in Agricultural Economics to the students at the Institute. Separate staff for this purpose for the Indian Agricultural Research Institute is in our opinion not necessary.
- (b) We see no justification for the post of a Joint Director. The Director will require an Administrative Officer (whether the officer is designated as Registrar or as Administrative Officer is to us immaterial) to assist him in the work of administration but no additional relief is justified.
- (c) The proposal to create a post of Estate Manager in addition to the existing post of Assistant Engineer is unjustified. One technical officer of the grade of Assistant Engineer should be able to look after both the maintenance of the buildings and equipment of the estate and also carry out all other administrative work connected with the management of the estate.
- (d) The Agricultural Engineering Section should be abolished. The function of this section seems to be confined to carrying out extensive tests of types of agricultural machinery marketed in India by manufacturing concerns in the United Kingdom, the

United States of America and elsewhere and to find out whether they are useful in Indian conditions. The competition amongst manufacturers ensures that the merits or defects of any particular machine are brought to the notice of the intending purchaser. We do not therefore see the necessity for this work in the institute.

- (e) In certain sections of the Indian Agricultural Research Institute, insecticides are tested for manufacturers free of cost. Appropriate fees should be charged for these tests and the fees recovered credited to Government.

12. *The Central College of Agriculture.*—The Central College of Agriculture has been recently started to train candidates up to the B.Sc. degree in Agriculture. It is designed to admit about 100 students per year and is intended to cater for students from the Centrally Administered Areas and those States and Provinces which have no training facilities. The College should either be transferred to the Delhi University with which it is proposed to affiliate it or be placed under the Director of the Indian Agricultural Research Institute. The Professors and Research workers in the Institute could be employed to guide and also give a few lectures to the undergraduates in the subject in which they are specialists and it should be possible to utilise the laboratory facilities available at the Institute for this college. Even if some expansion of the laboratories at the Indian Agricultural Research Institute is necessary, the cost should be much less than the cost of an entirely new laboratory. In our opinion it will be conducive to efficiency and economical, if the College is located in the Indian Agricultural Research Institute and run under the general supervision of the Director.

13. *The Indian Dairy Research Institute.*—The Indian Dairy Research Institute is proposed to be expanded at a non-recurring cost of Rs. 215 lakhs and recurring cost of Rs. 32.8 lakhs per annum. Before the war the Indian Dairy Research Institute at Bangalore was a small establishment consisting of one Dairy Expert and two other Technical Officers and its main function was to train candidates for the Indian Dairy Diploma, a two year course. In addition, there is a short course of 3 to 6 months duration in Dairy Science for farmers' children. Besides, graduates in Agriculture and Veterinary Sciences were given facilities to conduct research and the staff was also expected to carry out research and give technical advice to the dairy trade. Since 1940 the Institute has expanded somewhat and the annual expenditure in 1947-48 was Rs. 5,47,000. The original scheme contemplated establishment at Delhi of the Institute and a Dairy College as an adjunct to the Institute, while the existing Institute at Bangalore would be converted into a sub-station and continue to give training for the Dairy Diploma Course. Since then the location of the Institute has been under further examination of the Ministry of Agriculture and the latest proposal is to locate the Institute at Bangalore itself. The detailed estimates for the Institute have not yet been examined by the Ministry of Finance. While it is necessary for a country of the size of India to have a first-class Dairy Training and Research Institute, we feel that, consistently with the need for economy in the present juncture, there is no justification to have separate sections for Dairy Engineering and Dairy Nutrition as has been proposed. To the extent it becomes necessary to carry out the work allocated to these sections, it can be looked after in the Dairy Husbandry and the Dairy Technology Sections without any extra staff or appreciable addition to

equipment. The Dairy Development Adviser agrees that a separate section for Nutrition is not immediately necessary. The Dairy Engineering Section is expected—

- (a) to test suitability of mechanical appliances manufactured commercial concerns; and
- (b) to evolve and devise new equipment and improve existing equipments.

It is doubtful whether a Government employee is a proper instrument for the latter purpose. In order that new designs may be useful, they must be exploited on a commercial scale which is unlikely to happen in respect of a design evolved in a Government Department, particularly in present conditions when the demand for dairy equipment is very small. The competition amongst manufacturers will ensure that the merits or defects of any machine are brought to the notice of an intending purchaser. No separate section should be necessary for the purpose. Another point which requires consideration is whether instruction both for the dairy diploma and for the dairy degree cannot be given in the same institution so as to better utilise the teaching staff employed and effect corresponding economies in the total cost of instruction. Similarly with the decision to locate the Institute and the Dairy College at Bangalore along with the Bangalore sub-Station it should be possible to reduce the expenditure on the purchase and maintenance of live-stock. We commend these points for the consideration of the Ministries of Finance and Agriculture.

**14. Cattle Breeding Farms.**—The Ministry of Agriculture are taking steps to establish a Cattle Breeding Farm at Jubbulpore at a non-recurring cost of Rs. 50 lakhs and a recurring expenditure of Rs. 7,25,000 per annum. It is also proposed to establish two more farms in other localities. India urgently needs new and improved breeds of cattle because, though the number of cattle in India is very large, they are of very poor quality. We have been informed that the plans for the establishment of these farms have been prepared after obtaining the best expert advice available both in India and abroad. We are also informed that the scheme will not yield results for 15 to 20 years. Experiments on genetics could perhaps be carried out on a less ambitious scale and more economically in the Military Dairy Farms and by expanding the cattle herds maintained by the Indian Agricultural Research Institute. Considering the cost of the scheme, we recommend that it should await more prosperous times.

There are a number of dairy farms under the Ministry of Defence which were established with the primary object of ensuring supply of milk and dairy products sufficient both in quality and in quantity to the Defence Services. It should be possible to make use of these farms both for carrying out experiments on breeding and on dairy problems. We understand the question is being jointly examined by the Ministries of Defence and Agriculture. We strongly recommend that the facilities available in these farms should be utilised to the fullest extent both to carry out research and to improve milk supply. If necessary, the farms should be taken over to be run by the Ministry of Agriculture, subject to the overriding condition that that Ministry should guarantee the requisite supply of milk and dairy products to the Defence Services.

In the Ministry of Agriculture there is a Registrar of Central Herd Books. This post was created with a view to maintain a register of pedigree cattle. The number of wellknown breeds of cattle in India is

few and the work that will fall on the Registrar is limited. We recommend that this post should be abolished and the work entrusted to the Animal Husbandry Commissioner.

15. *Fisheries Research Stations*.—As regards the Central Marine Fisheries Research Stations, this is the first time that a planned development of the fish industry in the country has been undertaken and it will be necessary to maintain close supervision in order to ensure that the effort is progressed on the right lines. For example, we were told that Indian students who had been sent to the United Kingdom for training in deep sea fishing were reluctant to go aboard the fishing boats. Persons selected for training in any line should before selection be informed fully of the nature and condition of their work and only persons who have an aptitude for the work should be selected. It would be wrong to train in fisheries persons who are expecting an office job on their return to India.

16. *Surveys*.—The Ministry of Agriculture is responsible for the Survey of India, the Zoological Survey and the Botanical Survey. We have no comments to offer on the Zoological Survey and the Botanical Survey.

The Survey of India is proposed to be expanded with a view to make up the arrears of work which accumulated during the war years and to meet the heavy demands on it consequent on the numerous multi-purposes schemes sponsored by the Government. It is understood that the cost of work undertaken for the multi-purpose schemes will be debited to those schemes. A point that transpired during investigation is that an appreciable proportion of the work done by Provincial Survey Organisations in the ordinary course of their duties can be useful to the Survey of India and can curtail the latter's survey work if only the Provincial Survey work was up to the standard required by the Survey of India. The cost of ensuring a sufficiently accurate survey by the Provincial Survey authorities will clearly be less than the cost of separate surveys by the Survey of India and the Provincial Survey Departments. Provincial Survey work could be improved technically by the Survey of India giving training to Provincial Survey Officers and by providing that Provincial Surveys in which the Survey of India is interested is supervised in its technical aspect by the Surveyor-General. We recommend that the Government of India should negotiate with the Provincial Governments as to the best manner of ensuring that there is no duplication of effort.

The Survey of India has entered into a contract with a foreign company registered in India for making aerial surveys. Aerial Surveys give quick results and with the increased pay rates for class IV staff may prove cheaper. We are told that India does not possess the equipment or personnel to form its own aerial survey. An Indian Aerial Service will be economical in the long run and we recommend that the question of building up such a Service as an adjunct of the Survey of India or of the Royal Indian Air Force should be examined as early as possible.

17. The Ministry of Agriculture has an Inspector General of Forests to advise on various forests problems. There is also a Forest Research Institute at Dehra Dun to conduct research train post-graduate workers and other technical personnel required by the Central and Provincial Governments. Moreover, the Centre has got valuable forests under its direct control both in Coorg and in the Andamans.

The action with regard to conservation of forests in one Province is likely to affect seriously adjacent Provinces. In view of these considerations, the Ministry of Agriculture has requested that 'Forest laws and working plans' should be made a Central subject. Even in the past while forests were a Provincial subject, the Inspector General of Forests, by virtue of his status and personnel influence, was able to advise, guide and control the working plans prepared by Provincial Forest Departments. We agree that this position should remain unchanged and that the post of Inspector General of Forests should continue.

For the present only the forests in the southern island of the Andamans are being exploited but arrangements made in this respect are uneconomical. The sawmills and loading arrangements in the island were in need of extensive renovation when they were reoccupied after the Japanese left. A small sawmill has now been erected by salvaging the old sawmill and at the same time Government have purchased a sawmill and transported the machinery to the site. But though over a year has elapsed since the machinery was landed at the Andamans the mills have not yet been erected. The difficulty seems to be the want of technical staff; and the Ministry of Agriculture contend that they have been unable to recruit the necessary staff because of the refusal of the Ministry of Finance to sanction suitable scales of pay. It is essential that the forests in the Southern Andamans should be exploited to the fullest extent and we recommend that early steps should be taken to recruit the necessary staff and to take other necessary action.

The forests in the North and Central Andamans have till now not been exploited to any extent. The proposal made by Government for the leasing of the forests on these islands to four private companies has apparently been referred back for further examination to the Ministry by the Standing Finance Committee. The experience of departmental working of the forests in the Southern Island furnishes ample testimony that departmental working of these forests is likely to lead to delay and inefficiency. We therefore recommend that steps should be taken to lease out to commercial or semi-commercial concerns the forests in the Northern and Central Islands for exploitation. Government should, however, ensure that trees are felled according to working plans approved by Government and that regeneration of the forests is properly attended to, preferably under Government agency.

18. *The Forest Research Institute, Dehradun*.—This Institute is responsible for conducting research into various problems connected with the development and administration of forests and the utilisation of forest products and for training the officers required to staff the Forest Administrations under the Central and Provincial Governments. The Ministry of Agriculture have a scheme to increase the research and training facilities that are available at a cost of Rs. 89,53,500 non-recurring and Rs. 40,00,000 recurring over a period of five years. It is proposed to strengthen the administrative and research branches of the Institute and to instal pilot plants to carry out experiments regarding the commercial utilisation of indigenous forest produce in manufacture of paper, plywood and certain other products. Most of the Machinery has already been ordered and received in India; other items of machinery are necessary for full utilisation of machinery already received. An important item of expenditure is on additional residential and office accommodation—both

essential in view of the proposed development programme. We have the following recommendations to make in regard to these plans:

- (a) At present there is a President in charge of the Institute who is assisted in his work by a Director of Forest Research, a Director of Forest Education, a Personal Assistant and a Registrar. It appears to us that considering the volume of work involved, the assistance given to the President is liberal. It is understood that previously the President, Forest Research Institute combined the functions of the head of the Institute as also that of Inspector General of Forests and was assisted in respect of his duties relating to the Institute by a Vice-President. If the two posts are again combined, there may be justification for providing him with a Deputy to look after the affairs of the Institute. But as long as the two posts are separate—and this may be necessary for some time to come—the post of Director, Forest Research seems superfluous and must be abolished. Indeed, if the President is to be relieved both of general supervision over research and of general supervision over education, we cannot understand what administrative function he is expected to perform. On the training side, overall supervision of the educational programme could be ensured by entrusting the duties of supervision and co-ordination to the Director, Indian Forest College. In other words, the post of head of the Forest College and the Director, Forest Education could be combined. The post of Principal, Indian Forest Rangers College would continue to remain separate. With regard to the arrangements to give publicity to the Institute's work and to bring to the notice of Provincial Governments and Industry and results achieved by the Institute, we agree that a Public Relations Organisation is necessary. In our opinion it should be sufficient to have a Forest Officer in the senior grade applicable to the class I service to look after this work. He may be assisted by a class II officer. Again of the two posts of Registrar and Personal Assistant, only one post should remain and the other should be abolished.
- (b) The Institute is undertaking research into technical problems connected with the paper and plywood industry and is purchasing pilot plants for the purpose at considerable cost. While these schemes of research should be pursued, it seems that such schemes of research should be financed by the Industry concerned and controlled by committees on which the Industry is represented. This will ensure that schemes of research are directed to solve the practical difficulties facing the Industry and that they are as economical as possible. It is understood that the paper industry is making a voluntary contribution but the contribution is not sufficient to meet the cost of expansion. Researches into problems relating to various agricultural commodities are financed by cesses levied on the commodities and controlled by committees on which the payers of the cesses are represented and we recommend that this policy should be extended to researches into the manufacture of paper and plywood.

- (c) The pilot-plants will not be kept busy throughout the year on research work though the staff employed on the plants will continue to remain employed and paid. The solution will be to direct the President of the Institute to keep the plants busy, whenever they are not required for research purposes, on production of paper and plywood and to sell the products produced. The surplus production could easily be taken up by Government Departments. We were assured that the products can be produced at a price which will be much less than the present market price. Whether this be true or not, there is clearly justification in keeping the mills in full production as long as the primary costs of production are less than the market price. It is particularly necessary to keep the plants on full production at the present time when both paper and plywood are said to be in short supply.

19. *Directorate of Plant Protection, Quarantine and Storage.*—A Directorate of Plant Protection, Quarantine and Storage has been established with effect from May 1946 under the Ministry of Agriculture to take measures for safeguarding India from the entry of foreign plant pests and diseases as well as for protecting crops from pest and disease outbreaks within the country. We realise the importance of controlling the spread of insect pests and diseases in the country whether from outside or from one Province to another. But the establishment proposed for the purpose is on an extravagant scale and we recommend it should be modified as set out below:—

- (a) As regards the locust control organisation, a Deputy Locust Entomologist will be necessary only so long as the Plant Protection Adviser is himself the head of the Locust control division. There is no necessity, however, for the post of Assistant Locust Entomologist. The Ministry of Agriculture agreed that it was not necessary to have a class II officer as a Locust Transport Officer. That post should be downgraded to Class III.
- (b) We do not consider that separate quarantine establishments should be provided at airports. The number of plants which will be imported by air is very limited (we understand that at present there is an absolute prohibition of imports by air). If, however, on any particular occasion a special consignment arrive by air, the local Customs authorities should arrange for necessary inspection at Delhi with the assistance of the Indian Agricultural Research Institute and at Bombay and Calcutta through the Port Quarantine Organisations.
- (c) In the port Quarantine Organisation at Bombay and Calcutta separate posts of Entomologist and Plant Pathologist are not necessary. One Class II officer at each of these ports should suffice. Where he requires expert assistance he could either consult his superior at Delhi or obtain the assistance of Provincial Government's expert.
- (d) As the volume of imports through Madras is stated to be comparatively small, we suggest that there should be no separate Port Quarantine Organisation at this port but arrangements

should be entered into with the Provincial Agricultural Department to carry out the necessary inspection work.

- (e) Separate Divisions of Foreign Quarantine, Plant diseases and General Entomology at Headquarters are unnecessary and should not be established. The duties of the heads of these divisions are to carry out research and give advice to both the Quarantine officers and Provincial Governments. In order to carry out research and to give advice laboratory facilities will be needed. We are clearly of the opinion that all such work should be concentrated in the Indian Agricultural Research Institute where the necessary facilities already exist to a considerable extent. The head of the Division of Foreign Quarantine is also in administrative charge of the Quarantine officers at ports and aerodromes but we have already recommended that these organisations should be seriously curtailed.
- (f) It is proposed to appoint a number of regional liaison officers to advise and assist Provincial Governments in preventing the spread of plant diseases from one province to another. In support, two arguments were put forward. First, it was claimed that the machinery and equipment required to fight plant pests and diseases could be maintained more economically under a Central agency as the pests and diseases occurred infrequently and it would be uneconomical for each Province to maintain a full complement of equipment. Secondly, it was contended that past experience had shown that Provinces do not display sufficient energy in combating pests and diseases with the consequence that they spread rapidly and cause considerable havoc. We agree that the equipment required to fight the diseases and pests should be located at a few selected places but; ordinarily a Class III, or at best, a Class II officer, could be placed in charge to keep them in good condition and despatch them to the places where they are needed. As regards the second argument, we feel that the control of pests and diseases can be best effected by the willing co-operation of the Provincial Government concerned and that notwithstanding previous failures to obtain Provincial co-operation, if any, provincial machinery should be utilised for the purpose. Unless the Central Government intends to establish a wide net work of its officers,—and there is no justification for such a course — it must depend on the local revenue and agricultural staff to bring to its notice the appearance of any disease or pest and in taking measures to eradicate them. We recommend that there should be no regional liaison officers but stores officers to look after the equipment may be appointed.

20. *Directorate of Marketing*.—The Department of Marketing under the Agricultural Marketing Adviser is responsible for making a survey of existing marketing conditions of agricultural produce, introducing standards of grading and quality particularly in respect of overseas exports and for improving the existing marketing facilities. The organisation of this Department was reviewed in the year 1946 by a Marketing Sub-Committee under the chairmanship of Sir T. Vijayaraghavachariar which has recommended a substantial expansion of the Department. Any scheme for



quality control and marketing must be on an all-India basis. This Department is doing valuable work and particularly if our export trade is to be improved and the primary producer is to get a fair return for his produce, it is essential both to improve quality control and marketing intelligence. We therefore recommend that this Department which is continuing on a temporary basis since 1934 should be placed on a permanent basis. At the same time, we notice that the programme of work planned by the Department provides for the survey of marketing conditions of wheat, rice, oilseeds and other articles, the conditions relating to the production movement, purchase and distribution of which are at present not at all normal, because of control or other reasons. It is wasteful to conduct marketing surveys where conditions are abnormal. The marketing surveys proposed in respect of foodgrains and oilseeds should be postponed for at least 3 years. We also suggest that the Ministry of Agriculture should review the plan relating to other marketing surveys with a view to postpone surveys of articles whose marketing is controlled or otherwise being carried out in the present abnormal conditions. The postponement of marketing surveys should result in a reduction of staff employed on such service. At present there are 6 senior Marketing Officers and 12 Assistant Marketing Officers and these officers are expected to complete the marketing survey programme in about 3 years. We recommend that this staff should be reduced to 3 Senior Marketing Officers and 6 Assistant Marketing Officers.

Some of the articles in respect of which surveys are proposed to be conducted are within the special jurisdiction of Commodity Committees, e.g., lac, cocoanut and coconut products. In our view the cost of marketing surveys and other work preliminary to quality grading of such articles should be borne by the Commodity Committee concerned and not by Government.

**21. Advisory Organisation.**—In the Ministry of Agriculture there are a number of Advisers whose functions are primarily to give advice to the Ministry on technical matters. Under the existing system of work any file, whether the issues raised are scientific or technical or purely administrative, is sent to the Adviser on the subject or his assistants who note on it. The file then goes to a Secretariat Officer proper and there is a chain of noting on the one hand of the Adviser and his deputies and on the other of Secretariat Officers, where each officer trespasses on grounds that are not in his jurisdiction. The Advisers are thus acting as additional Secretariat Officers who, though they contribute something to the technical questions on a file, deal with other matters too and get immersed in a lot of desk work. We feel that the system of work should be so re-arranged as to preclude an Adviser wasting his time on purely Administrative matters. In order to ensure this, it is necessary to have strict instructions, which should not be changed according to the whim of the superior officers for the time being, that no file should be referred to an Adviser but whenever an Adviser's opinion is required a self-contained memorandum setting out the technical matters on which his opinion is sought should be sent to him. This will ensure that an Adviser is employed only on the work for which he is required and should result in a considerable diminution of his total work so as to enable him to pay more attention to technical problems and also to dispense with a number of his deputies. We are indicating later what we consider should be the strength of the Advisers in the Ministry under the revised procedure.

We understand that the Ministry of Agriculture proposes to appoint a Co-operative Adviser. The Central Government's functions in respect of co-operation are development of co-operation in the Centrally Administered Areas and to advise Provinces on problems of co-operation. Practically every Province has a well-developed Co-operative Department and there is no necessity for a Co-operative Adviser at the Centre. The Reserve Bank of India is maintaining a specialised staff to investigate and advise on Co-operation and Rural Credit. With regard to other matters, the Agricultural Marketing Adviser's services should be sought. We are of the view, this post is unnecessary.

22. *Set-up of the Ministry.*—We have considered the set-up of the Ministry in the light of the above recommendations and have prepared a chart showing the staff which will be required by the Ministry (Annexure I). A statement containing the existing set-up of the Ministry is attached (Annexure II). The distribution of work proposed in the chart is intended to be illustrative only and to show how the functions pertaining to the Ministry can be carried out by the staff recommended. But it does presume that every grade of officer will be called upon to discharge the full duties and responsibilities of the post [c.f. para. 2 (c) above]. We do not think that any separate publicity staff should be attached to the Ministry of Agriculture.

23. The annual savings that would result from these recommendations are Rs. 93,61,200, details of which are shown in Annexure III.

24. *Summary of Recommendations.*—Our main recommendations are set out below:—

(a) While the Grow More Food Campaign should continue, the Centre should confine its subsidies under the scheme only to projects that will result in increased yield of foodgrains, root crops and fish in maritime provinces. The method of work should be modified as suggested in paras. 3 and 4.—(Paras. 3 to 6).

(b) The Central Tractors Organisation to look after reclamation by heavy tractors should be sanctioned for a period of 5 years. That Organisation should not undertake mechanical cultivation of lands by light tractors.—(Para. 7).

(c) The Central Ground Water Organisation should be abolished.—(Para. 8).

(d) The method of work in the Indian Council of Agricultural Research should be revised as recommended in paras 9 and 10.

(e) The scheme for expansion of the Indian Agricultural Research Institute should be modified as suggested in para. 11.

(f) The possibility of running a Central College of Agriculture as an adjunct to the Indian Agricultural Research Institute should be examined.—(Para. 12).

(g) The scheme for expanding the Indian Dairy Research Institute should be re-examined in the light of the comments in para. 13.

(h) The scheme to establish a Cattle Breeding Farm at Jubbulpore should be postponed for the time being. Steps should be taken to utilise the Dairy Farms under the Ministry of Defence for carrying out experiment in breeding and dairy problems.—(Para. 14).

(i) The question of improving the quality of the Provincial Surveys which are likely to be useful to the Survey of India and prevent duplication of effort should be taken up with the Provincial Government. (Para. 16).

(j) The question of building up an Aerial Survey Service as an adjunct of Survey of India or of the Royal Indian Air Force should be examined as early as possible.—(Para. 16).

(k) Early steps should be taken to recruit the necessary staff and to place the Forest Department in the Andamans in a position to exploit fully the forests in the Southern Island. Also the forests in Northern and Central Islands should be leased to commercial or semi-commercial corporations for exploitation subject to suitable safeguards.—(Para. 17).

(l) The organisation and working of the Forest Research Institute, Dehra Dun, should be reviewed in the light of the recommendations in para. 18.

(m) The Directorate of Plant Protection, Quarantine and Storage should be re-organised as recommended.—(Para. 19).

(n) The Agricultural Marketing Department should be established on a permanent footing but the programme of work of marketing surveys during the next few years should be reviewed with a view to exclude marketing surveys of articles whose production, transport and marketing are controlled or are otherwise abnormal. Also the cost of marketing surveys and other preliminary work relating to quality grading of articles which are within the jurisdiction of special Commodity Committees should be debited to the Committee concerned.—(Para. 20).

(o) Advisers should be used for the purpose for which they are meant viz. to give advice to the officers of the Ministry on technical matters. With a view to prevent their misuse as additional Secretariat Officers and thus getting immersed in paper work to the detriment of their technical work, no Secretariat file should be sent to an Adviser but any technical points on which his advice is necessary should be referred to him by a self-contained memorandum.—(Para. 21).

(p) The set up of the Ministry should be as proposed in Annexure I.—(Para. 22).

KASTURBHAI LALBHAI, *Chairman.*

P. V. R. RAO,  
*Officer on Special Duty.*  
G. S. RAU,  
*Secretary.*

B. DAS,	} <i>Members.</i>
S. K. PATIL.	
JATPAL SINGH.	
ISHWAR DAYAL,	

*New Delhi, dated the 6th December, 1948.*



## ANNEXURE III (para 22)

*I. Savings in the Ministry of Agriculture consequent on the recommendations.*

Category	Present strength	Proposed strength	Reductions	Savings per annum
1. Secretary . . . . .	1	1	..	
2. Joint Secretary . . . . .	3	1	2	
3. Deputy Secretary . . . . .	4	2	2	
4. Under/Asstt. Secretary . . . . .	8	5	3	
5. Public Relations Officer . . . . .	1	..	1	
6. Refrigeration Development Engineer . . . . .	1	1	..	
7. Asstt. Refrigeration Development Engineer . . . . .	1	..	1	
8. Co-operation Adviser . . . . .	1	..	1	
9. Deputy Cattle Utilisation Adviser . . . . .	1	..	1	
10. Asstt. Cattle Utilisation Adviser . . . . .	1	..	1	
11. Agricultural Development Commissioner . . . . .	1	1	..	
12. Deputy Agricultural Production Commissioner . . . . .	3	2	1	
13. Asstt. Agricultural Production Commissioner . . . . .	2	1	1	
14. Chief Bio-Chemist . . . . .	1	1	..	
15. Compost Development Officer . . . . .	1	1	..	
16. Asstt. Compost Development Officer . . . . .	1	..	1	
17. Director of Agriculture (Machinery) . . . . .	1	1	..	
18. Asstt. Director of Agriculture (Machinery) . . . . .	2	1	1	
19. Fisheries Development Adviser . . . . .	1	1	..	
20. Deputy Fisheries Development Adviser . . . . .	1	..	1	
21. Asstt. Fisheries Development Adviser . . . . .	1	..	1	
22. Deputy Livestock Adviser . . . . .	1	..	1	
23. Asstt. Livestock Adviser . . . . .	1	..	1	
24. Dairy Development Adviser . . . . .	1	1	..	
25. Deputy Dairy Development Adviser . . . . .	1	1	..	
26. Asstt. Dairy Development Adviser . . . . .	2	..	2	
27. Technical Officers . . . . .	2	..	2	
28. Asstt. Private Secretary to Hon'ble Minister . . . . .	1	1*		
29. Superintendents . . . . .	11	8	3	
<b>TOTAL—Gazetted Officers . . . . .</b>	<b>57</b>	<b>30</b>	<b>27</b>	<b>2,77,200</b>
Asstts.-in-Charge . . . . .	9	1	8	
Assistants . . . . .	110	45	65	
Clerks . . . . .	112	40	72	
<b>TOTAL—Non-Gazetted Staff . . . . .</b>	<b>231</b>	<b>86</b>	<b>145</b>	<b>1,99,600</b>

\* The post of Assistant Private Secretary to Hon'ble Minister will continue so long as there is no post of Private Secretary to H.M. in the Ministry of Agriculture, and for as long as the H.M. in charge of Agriculture holds another portfolio also. When there is an Hon'ble Minister exclusively for Agriculture, the post of Private Secretary to H.M. will be revived and the post of Assistant Private Secretary discontinued.

ANNEXURE III (para 22)—*contd.*

Category	Present strength.	Proposed strength.	Reductions.	Savings per annum. Rs. approx.
<i>Directorate of Economics and Statistics*</i>				
Economic and Statistics Adviser . . . . .	1	1	..	
Deputy Economic and Statistics Adviser . . . . .	2	2	..	
Asstt. Economic and Statistics Adviser . . . . .	3	3	..	
Research Officers . . . . .	8	8	..	
<b>TOTAL</b> . . . . .	<b>14</b>	<b>14</b>	<b>..</b>	
Pay of Officers and Establishment				4,76,800
Allowances and other charges . . . . .				2,38,400
<b>TOTAL</b> . . . . .				<b>7,15,200</b>

*II. Savings on schemes for which Budget Provision Exists*

Category	Capital Expenditure		Revenue Expenditure	
	Budget Provision	Approximate Savings	Budget Provision	Approximate Savings
	Rs.	Rs.	Rs.	Rs.
1. Central Groundwater Organisation . . . . .	Nil	Nil	56,39,000	56,39,000
2. Indian Council of Agricultural Research:				
(a) Abolition of the post of—				
(i) Agricultural Commissioner . . . . .				31,400
(ii) Dy. Fruit Development Adviser . . . . .				12,000
(iii) 2 Assistant Fruit Development Advisers . . . . .				14,400
(b) Downgrading of the post of Vice-Chairman (from Additional Secretary to Joint Secretary) . . . . .				3,000
(c) Abolition of the post of Registrar, Central Herd Books . . . . .				7,200
			6,48,600	68,000
3. Indian Agricultural Research Institute—				
(a) Abolition of the post of Joint Director and creation in lieu of a post of Administrative Officer . . . . .				10,000
(b) Abolition of the Agricultural Engineering Section . . . . .				1,90,000

\* No change suggested for the present. A ministerial staff of 1 Superintendent 6 Assistants and 2 Clerks has been included in the staff for the Ministry.

NOTE.—Stenographers and Class IV servants will be dealt with separately. These figures do not include leave reserve.

ANNEXURE III. *Contd.**Savings on Schemes for which Budget Provision Exists*

Category	Capital Expenditure		Revenue Expenditure	
	Budget Provision	Approximate Savings	Budget Provision	Approximate Savings
	Rs.	Rs.	Rs.	Rs.
(c) Abolition of the following Sections—				
(i) Information Service . . . . .				50,000
(ii) Statistical Division . . . . .				50,000
(iii) Agricultural Economics Division . . . . .				50,000
			24,28,000	3,50,000
4. Directorate of Plant Protection and Quarantine—				
(a) Curtailment of Headquarters Organisation . . . . .				1,65,000
(b) Abolition of Seaport Organisation at Madras . . . . .				15,000
(c) Abolition of two Class II posts and curtailment of staff in the seaports at Bombay and Calcutta . . . . .				20,000
			5,78,100	2,00,000
5. Directorate of Marketing—				
(a) Abolition of the three posts of Senior Marketing Officers . . . . .				25,000
(b) Abolition of the six posts of Assistant Marketing Officers . . . . .				25,000
			9,04,800	50,000
6. Advisers' Organisation. Provision of staff for the new Advisers' set up—				
Superintendents . . . . . 8				(—)1,69,000
Assistants . . . . . 39				
Clerks . . . . . 32				
7. Cattle Breeding Farm, Jubbulpore. Postponement of the Scheme of Cattle Breeding. . . . .	15,00,000	15,00,000	9,71,000	9,71,000
8. Indian Forest Institute and College (Reorganisation in the Officers' set up) . . . . .			18,62,000	37,000
TOTAL . . . . .	15,00,000	15,00,000	1,30,31,500	71,46,000
ABSTRACT OF SAVINGS				
I. Ministry . . . . .			29,42,000	7,15,200
II. Savings on schemes for which Budget Provision exists . . . . .	15,00,000	15,00,000	1,30,31,500	71,46,000
TOTAL—I & II . . . . .	15,00,000	15,00,000	1,59,73,500	78,61,200
TOTAL—Savings	{ 15,00,000 (Capital) 78,61,200 (Revenue)			
	93,61,200			

## ANNEXURE IV (para I)

*List of subjects dealt with in the Ministry of Agriculture*

1. Agriculture (including Horticulture).
2. Animal Husbandry (including veterinary).
3. Fisheries.
4. Forests (including Arboriculture).
5. Central agencies and Institutes for training and research in Agriculture, Animal Husbandry, Dairying, Fisheries, Forestry, etc.
6. The Indian Agricultural Service, Indian Veterinary Service, Indian Forest Service and Indian Forest Engineering Service.
7. Grow More Food and Fodder.
8. Land Utilization.
9. Minor and Emergency Irrigation.
10. Agricultural Machinery.
11. Fertilizers and Manures.
12. Control of Pests and Diseases of Plants and Animals.
13. Commodity Committees (except those relating to tea, coffee and rubber).
14. The Indian Council of Agricultural Research.
15. Cesses for financing the Indian Council of Agricultural Research and Commodity Committees.
16. Central Agricultural Marketing Department.
17. Agricultural Statistics and Economics.
18. Agricultural Indebtedness and Credit.
19. Co-operation.
20. Famine.
21. Land Revenue and Land Tenure.
22. Land Acquisition and Land Alienation.
23. The Survey of India.
24. The Botanical Survey.
25. The Zoological Survey.



## ANNEXURE V (Para 2)

*Agriculture*

(Figures in thousands of rupees)

	1938-39 (Pre-partition)	1947-48	1948-49
1. Main Ministry . . . . .	3,20* (roughly)	23,76	29,42
2. Indian Council of Agricultural Research . . . . .	9,05	25,10	20,49
3. Research Institutes—			
(a) Indian Agricultural Research Institute . . . . .	7,42	22,74	24,28
(b) Forest Research Institute . . . . .	7,93	34,08	26,04
(c) Indian Veterinary Research Institute . . . . .	7,16	27,95	25,47
(d) Others . . . . .	..	20,87	15,15
4. Survey of India . . . . .	23,85	83,14	60,67
5. Zoological Survey . . . . .	1,75	5,74	3, 33
6. Botanical Survey . . . . .	73	3,60	1,66
7. Agricultural Marketing . . . . .	4,82	14,86	9,05
8. Directorate of Plant Protection and Quarantine Organisation . . . . .	..	5,08	5,78
9. Central Ground Water Organisation . . . . .	..	11,00	56,39
10. Other Expenditure . . . . .	9,81	39,20	60,09
11. Other Post-war Expenditure . . . . .	..	82,36	28,53
12. Indian Dairy Department . . . . .	2,06	15,37	6,56
TOTAL . . . . .	77,80	4,19,86	3,72,91
Capital Expenditure . . . . .	Nil	7,18,17	6,06,56
GRAND TOTAL . . . . .	77,80	11,38,03	9,79,47

\* This shows expenditure slightly over 1/3rd of the entire expenditure under the Department of Education, Health and Lands in 1938-39.

